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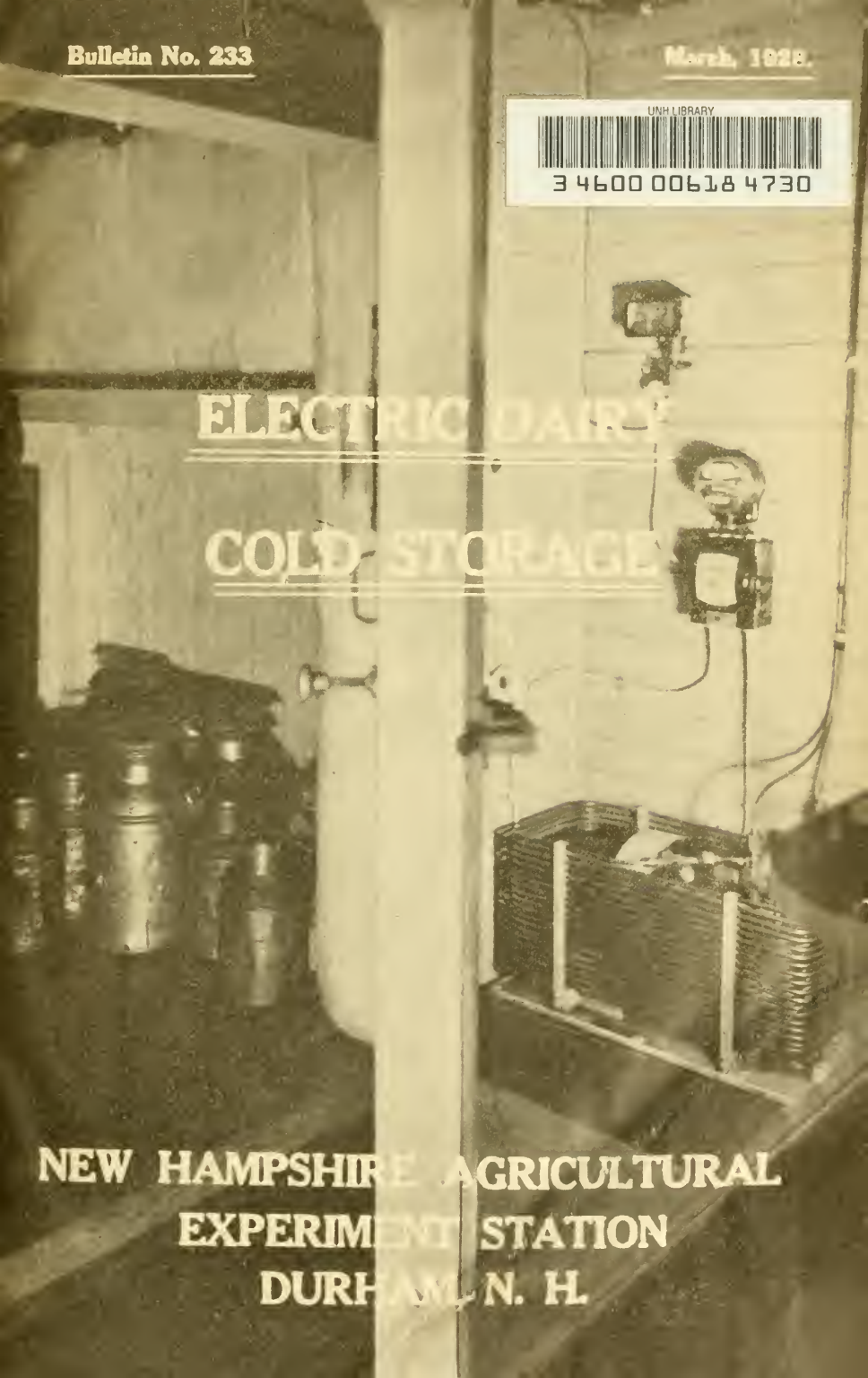

ELECTRIC DAIRY COLD STORAGE

NEW HAMPSHIRE AGRICULTURAL EXPERIMENT STATION
DURHAM, N. H.

[Bulletin 235]

RESULTS OF SEED TESTS

Made July 1, 1927 to June 30, 1928

The total number of seed samples tested in the Experiment Station laboratory this year was three hundred seventy-seven. Of this number three hundred fourteen were official samples which are reported in this bulletin. In addition to these sixty-three private samples were tested. The official samples were collected by an agent of the Commissioner of Agriculture and sent to the seed testing laboratory where purity analyses and germination tests were made in order to ascertain if each sample was of as good quality as its accompanying guarantee indicated.

A certain amount of variation is to be expected in comparing the results of two or more purity analyses. For this reason a "tolerance" or variation is allowed in accordance with the following formula, applied to the guarantee given. The sample is considered as being made up of two parts, the one being the pure seed and the other the balance of the sample. The tolerance in per cent allowed for each part is two-tenths of 1 per cent plus 20 per cent of the lesser part. For instance, if a sample is guaranteed 99.60% pure seed, it may test as low as 99.32% or as high as 99.88% and would be "satisfactory". In the same way, a sample guaranteed 92.80% may test as low as 91.17% or as high as 94.43% and be "satisfactory". If a sample is found to be better than the highest figure in the tolerance, it is marked "above" in this bulletin; if lower than the lowest figure, the actual figure is reported.

A wider germination tolerance is allowed between the results of the test and the guarantee, as follows:

Guarantee	Allowable variation
%	%
90 or over	6
80 or over but less than 90	7
70 or over but less than 80	8
60 or over but less than 70	9
Less than 60	10

Accordingly, a sample guaranteed 92% germination is "satisfactory" if it tests 86% to 98%. A sample guaranteed 85% may fall as low as 78% or as high as 92. If a sample tests higher than the per cent of variation allowed it is marked "above" in this bulletin or, if it tests below the variation allowed, the actual figure is reported.

The summary table on the last page will show the general results of the seed inspection work for the year ending June 30, 1928. It may be noted that a large proportion of the samples were found to be satisfactory. In purity 92% of all samples were found satisfactory or better in purity, and in germination 85% were found satisfactory or better.

The following is a copy of the New Hampshire law relative to seed inspection according to Chapter 80, Session Laws of 1921:

STATE DEPARTMENT OF AGRICULTURE

AN ACT TO REGULATE THE SALE OF AGRICULTURAL SEEDS

Section 1. That the term "agricultural seeds" or "agricultural seed" as used in this act, shall be defined as the seeds of timothy, redtop, alfalfa, alsike clover, crimson clover, red clover, sweet clover, white clover, Hungarian millet, fescues, Canada blue grass, Kentucky blue grass, brome grass, tall meadow oat grass, orchard grass, Italian rye grass, perennial rye grass, sudan grass, Canada field peas, cowpeas, soy beans, vetches and other grasses and forage plants including turnips, rutabagas and mangles, also barley, buckwheat, corn, oats, rye, wheat and other cereals which are sold, offered or exposed for sale within this state for sowing or seeding purposes.

Sect. 2. Every lot or parcel of agricultural seeds, as defined in section 1 of this act when in bulk packages or other containers of one (1) pound or more, shall have affixed thereto, in a conspicuous place on the exterior of the container, a plainly written or printed statement clearly and truly certfying: *First,* the commonly accepted

name of such agricultural seed; *second*, its approximate percentage of purity or its freedom from foreign matter or from other seeds distinguishable by their appearance, and, in the case of "special mixtures," the statement shall contain the name and approximate percentage by weight of each kind of agricultural seed in such mixture in excess of five (5) per cent by weight of the total mixture; *third*, the approximate percentage of germination of such agricultural seed together with the month and year said seed was tested; *fourth*, the full name and address of the vender of such agricultural seed.

SECT. 3. No person shall sell, or expose for sale, garden seeds or flower seeds in tied or sealed packets unless the same are plainly marked with the year in which the seed was tested.

SECT. 4. The word "approximate" as used in this act shall be defined in rules and regulations provided by the state commissioner of agriculture who shall be guided by the "rules and methods of testing" adopted and approved by the Association of Official Seed Analysts of North America.

SECT. 5. The percentage of purity and of germination of agricultural seeds as required to be shown by section 2 of this act shall be based upon tests or analyses conducted either by the state commissioner of agriculture or his agents, or by the seed merchant or his agents, *provided* that such tests or analyses made by the seed merchant or his agents shall conform to the reasonable regulations which said commissioner is hereby authorized to prescribe, or to the regulations or methods of testing adopted by the Association of Official Seed Analysts.

SECT. 6. The duty of enforcing the provisions of this act shall be vested in the state commissioner of agriculture. The said commissioner, upon notice to the seed merchants of this state through bulletins of his department or of the agricultural experiment station, shall be empowered to prescribe such reasonable rules and regulations and to appoint such analysts, agents and inspectors as may be necessary to secure the efficient enforcement of this act. It shall be the duty of said commissioner to publish, or cause

to be published, the results of tests and analyses of samples of agricultural seeds drawn as hereinafter provided, together with the names and addresses of the persons from whom the samples of seed were obtained. In his discretion, also, the said commissioner may publish such other information as he may deem advisable concerning the value, character and use of certain seeds.

Sect. 7. It shall be the duty of said commissioner either by himself or through his duly authorized agents, to inspect, sample, analyze and test any agricultural seeds sold, offered or exposed for sale for seeding purposes within this state, at such time and place and to such extent as he may determine. The commissioner and his inspectors shall have access at all reasonable hours to any premises or structures to take samples of any such agricultural seeds as may be in the possession of any importer, merchant, or agent, and he is hereby given authority in person or by his inspectors, upon notice to the importer, merchant or agent to take for analysis a composite sample of such agricultural seeds.

Said sample shall be taken from a parcel or number of packages which shall not be less than five (5) per cent of the whole lot inspected and shall be thoroughly mixed. From this composite sample two official samples shall be taken, each of which shall be securely sealed. One of these official samples shall be furnished to the seed merchant or party in interest, and the other retained by the commissioner or his inspector for test and analysis.

Sect. 8. In case a sample drawn as provided in the preceding section is found upon test and analysis to fall below the statement on the label attached to the lot or container from which said sample was secured, or if any agricultural seeds which are not properly labeled are being sold, offered or exposed for sale within the state, the commissioner of agriculture is hereby empowered to seize and hold such seed until proper labeling is effected by the owner or seller of said seed.

SECT. 9. It shall be unlawful for any person, firm or corporation to sell, offer or expose for sale within this state for seeding purposes any agricultural seeds or mixture thereof, as defined in this act, without complying with the requirements of the act, or to falsely mark or label any agricultural seeds or to interfere in any way with the commissioner of agriculture or his inspectors in the discharge of the duties herein named.

SECT. 10. Every violation of the privisions of this act relating to failure to label, or false labeling, shall be deemed a misdemeanor punishable by a fine not exceeding one hundred dollars. If the commissioner of agriculture shall find upon examination, test or analysis, that any person, firm or corporation has violated any of the provisions of this act, he or his duly authorized agent may institute proceedings in a court of competent jurisdiction to have such person, firm or corporation convicted therefor, or the said commissioner, in his discretion, may report the results of such examination or tests to the attorney-general, together with a sworn statement of the analyst and such other evidence of said violation as may have come to his knowledge or into his possession.

SECT. 11. Any citizen of this state shall have the privilege of submitting to the state commissioner of agriculture samples of agricultural seeds for test and analysis, subject to such rules and regulations as may be adopted by said commissioners; *provided, however,* that the commissioner of agriculture may by such regulations fix the maximum number of samples that may be tested or analyzed free of charge for any one citizen in any one period of time and fix charges for tests and analyses of samples submitted in excess of the number tested free of charge.

SECT. 12. Chapter 61, Laws of 1909, as amended by chapter 89, Laws of 1915, and all acts or parts of acts inconsistent herewith are hereby repealed.

SECT. 13. This act shall take effect September 1, 1921. Approved April 8, 1921.

SEED EXAMINATION, 1928

Sample No.	Kind of Seed, Brand, Name and Address of Dealer	Purity		Germination	
		F'nd	Guaranteed	F'nd	Guaranteed
6868	Alfalfa (Pedigreed, 2359) Chase Grain Mill, Plymouth	S	99.78	S	94
6808	Alfalfa (Grimm) E. C. Foss Co., Rochester	S	99.50	S	90
6827	Alfalfa (Blackfoot Grimm) Hill Hdw. & Paint Co., Nashua	S	99.50	S	90
6863	Alfalfa (Grimm) Keegan and French, Franklin	S	99.50	S	92
6711	Alfalfa (Canada Grimm) McQuesten & Lewis, Manchester	S	99.14	67.5	94
6682	Alfalfa (Grimm, Pine Tree, 27599) Merrimack Farmers Exchange, Manchester	S	99	S	91
6786	Alfalfa (Grimm Idaho, 27695) J. H. Seavey, Dover	S	99.64	S	96
6725	Alfalfa (Grimm, 27678-79) Thompson & Hoague Co., Concord	S	99.68	S	96
6678	Alfalfa (Idaho Grimm, Pine Tree, 27629) John B. Varick Co., Manchester	S	99	S	90
6807	Alsike (Pine Tree, 2115) Ayers & Jenkins Co., Rochester	S	97.10	S	93
6938	Alsike (Pan American) F. W. Clark, Wilton	S	97.50	S	90
6924	Alsike (21853) A. F. Clement & Son, Lisbon	90.49	95.35	A	90
6866	Alsike (Liberty, 2426) Farmer's Grain Store, Ashland	S	97	S	93.75
6765	Alsike Hilliard & Kimball, Exeter	91.26	97	70.5	86
6917	Alsike (XXX) Holbrook Grocery Co., Woodsville	S	93	75.5	92
6920	Alsike (XX) Holbrook Grocery Co., Woodsville	A	84	A	85
6819	Alsike (Liberty, 2508) J. Jones & Son, Alton	S	97.57	S	96.75
6718	Alsike (Pan American) Manchester Grain Co., Manchester	A	92.52	S	90
6706	Alsike Manchester Hardware Co., Manchester	96.96	99.50	S	85
6714	Alsike (Pine Tree, 2161) McQuesten & Lewis, Manchester	S	97.65	S	94
6860	Alsike (Ace, 2183) Meredith Grain Co., Meredith	S	94.30	S	92
6740	Alsike (Pine Tree, 2139-40) Merri. Farmer's Exchange, Concord	S	97.75	S	95
6697	Alsike (Pan American) J. J. Moreau & Son, Manchester	S	97.50	S	90
6837	Alsike (Pan American) Nashua Grain Co., Nashua	S	97	S	90
6771	Alsike F. W. Neal & Co., Dover	S	97	S	97
6791	Alsike (Eureka) F. W. Neal & Co., Dover	S	98	S	90
6927	Alsike (Pan American) Pike & Gale, Littleton	S	97	S	90
6878	Alsike (Eureka) C. N. Roberts, Meredith	94.69	98	S	90
6778	Alsike (Pine Tree, 21854) J. H. Seavey, Dover,	S	94	S	90

A=Above. S=Satisfactory.

SEED EXAMINATION, 1928 — Continued.

Sample No.	Kind of Seed, Brand, Name and Address of Dealer	Purity		Germination	
		F'nd	Guaranteed	F'nd	Guaranteed
6884	Alsike (Imperator) C. P. Stevens Co., Franklin	S	97	S	90
6795	Alsike Strafford Co. Grain Mill, Rochester	A	95	S	90
6727	Alsike (Ace 2141) Thompson & Hoague Co., Concord	S	96.60	S	93
6754	Alsike A. J. Turcotte, Newmarket	A	96	S	96
6755	Alsike (Choice) A. J. Turcotte, Newmarket	S	98	S	90
6653	Alsike (Ace, 211001) John B. Varick Co., Manchester	S	95	S	87
6656	Alsike (Pine Tree, 21790) John B. Varick Co., Manchester	S	97	S	93
6812	Alsike E. T. Willson, Farmington	S	98	S	90
6751	Alsike (Pan American) W. A. Young, Exeter	S	97	S	90
6850	Barley (6-row) Bell Hardware Co., Derry	S	99	S	90
6955	Barley (6-row, White Mtn.) J. Cushing Co., Peterborough	S	99	S	92
6880	Barley (Extra Fancy, White Mtn.) C. J. Goss, Lakeport	S	98.40	S	94
6919	Barley (6-row, Monadnock) Holbrook Grocery Co., Woodsville	S	99.37	S	96
6895	Barley (6-row, 71152) H. G. Holton, Lancaster	S	98.39	S	92
6792	Barley (2-row, 71127) Jenness Hardware Co., Dover	95.71	97.20	S	94
6875	Barley (6-row, 71153) Meredith Grain Co., Meredith	S	98	S	95
6690	Barley (6-row) J. J. Moreau & Son, Manchester	S	98	S	90
6963	Barley (2-row, 7127) C. A. Perkins, Charlestown	S	98	S	90
6783	Barley (2-row) S. A. Schurman & Son, Portsmouth	S	99	S	90
6776	Barley (6-row, 71133) J. H. Seavey, Dover	S	98.74	S	94
6724	Barley (71321, 6-row) Thompson & Hoague Co., Concord	S	98.50	S	96
6658	Barley (6-row, 7196) John B. Varick Co., Manchester	S	99	S	96
6730	Bluegrass, Kentucky (Choice) Capitol Hardware Co., Concord	S	80	S	80
6687	Bluegrass, Kentucky (032702) Manchester Hdw. Co., Manchester	S	86.20	S	80
6721	Bluegrass, Kentucky (032875) Thompson & Hoague Co., Concord	S	83.50	63.5	81
6654	Bluegrass, Kentucky John B. Varick Co., Manchester	S	80	S	72
6703	Buckwheat, Japanese (7658) Manchester Hdw. Co., Manchester	S	99	S	95
6739	Buckwheat, Japanese (76318) Merrimack Farmer's Exchange, Concord	S	99.50	S	96
6743	Buckwheat, Japanese (6743) Thompson & Hoague Co., Concord	S	98	S	93

A=Above. S=Satisfactory.

SEED EXAMINATION, 1928 — Continued.

Sample No.	Kind of Seed, Brand, Name and Address of Dealer	Purity		Germination	
		F'nd	Guaranteed	F'nd	Guaranteed
6693	Canada Field Peas J. J. Moreau & Son, Manchester	S	98	S	90
6773	Canada Field Peas (85169) J. H. Seavey, Dover	S	99.50	S	92
6679	Corn (Improved Leaming) J. J. Moreau & Son, Manchester	S	98	S	90
6692	Corn (Longfellow) J. J. Moreau & Son, Manchester	S	98	S	85
6667	Corn (Early 8-row Canada, 7424) John B. Varick Co., Manchester	S	99	S	85
6669	Corn (Improved Leaming, 7375) John B. Varick Co., Manchester	S	99	S	91
6652	Crimson Clover John B. Varick Co., Manchester	A	97	S	80
6651	Mangle-Wurzel (Golden Tankard) John B. Varick Co., Manchester	S	98	62.5	—
6655	Mangles (Narbitan Giant) John B. Varick Co., Manchester	S	98	66	—
6821	Millet, Golden W. F. Peel, Nashua	S	98	S	92
6966	Millet, Hungarian Abbott Grocery Co., Keene	A	98	S	90
6802	Millet, Hungarian (4771) Ayers & Jenkins, Rochester	S	98.45	77.5	88
6842	Millet, Hungarian Bell Hardware Co., Derry	97.61	99	S	90
6809	Millet, Hungarian P. W. Bragg, Farmington	S	98	S	91
6946	Millet, Hungarian W. A. Bryer, Peterborough	A	98.10	69	92
6797	Millet, Hungarian (6157) Freeman Carson, Rochester	S	98.76	S	86
6890	Millet, Hungarian Chase Grain Mill, Plymouth	A	98	52	80
6891	Millet, Hungarian G. G. Cummings, Bristol	S	99.08	72	87
6937	Millet Hungarian (4777) J. Cushing Co., Peterborough	A	97.04	S	80
6918	Millet, Hungarian (Fancy) Depot Store, Littleton	97.64	99	75	88
6761	Millet, Hungarian (Fancy) J. H. Griffin, Newmarket	95.48	99	43.5	90
6762	Millet, Hungarian J. H. Griffin, Newmarket	A	98	S	80
6825	Millet, Hungarian (Fancy) Hill Hdw. & Paint Co., Nashua	S	99	80	90
6764	Millet, Hungarian (Fancy) Hilliard & Kimball, Exeter	S	99	78.5	90
6923	Millet, Hungarian (XX) Holbrook Grocery Co., Woodsville	A	97	S	80
6953	Millet, Hungarian J. H. Kiniry, Claremont	A	90	S	85
6972	Millet, Hungarian (XX) Lewis Brothers, Lebanon	S	98.90	S	90
6686	Millet, Hungarian Manchester Hdw. Co., Manchester	S	99.44	71	88
6712	Millet, Hungarian (4762) McQuesten & Lewis, Manchester	S	99.44	61	80
6861	Millet, Hungarian (4778) Meredith Grain Co., Meredith	S	96.88	S	85
6691	Millet, Hungarian (Fancy) J. J. Moreau & Son, Manchester	S	98	74	90

A=Above. S=Satisfactory.

SEED EXAMINATION, 1928 — Continued.

Sample No.	Kind of Seed, Brand, Name and Address of Dealer	Purity		Germination	
		F'nd	Guaranteed	F'nd	Guaranteed
6855	Millet, Hungarian (047559) J. H. Morrill, Laconia	S	97.40	S	88
6851	Millet, Hungarian Parker Brothers, Goffstown	S	99	60	96
6829	Millet, Hungarian W. F. Peel, Nashua	S	98.36	S	80
6941	Millet, Hungarian (4775) W. N. Potter & Son, Winchester	S	97.40	S	85
6859	Millet, Hungarian (Fancy) H. C. Sanborn, Laconia	A	98	S	90
6784	Millet, Hungarian (Fancy) S. A. Schurman & Son, Portsmouth	A	98	70.5	90
6789	Millet, Hungarian (4770) J. H. Seavey, Dover	96.57	98.70	S	80
6726	Millet, Hungarian (4768) Thompson & Hoague Co., Concord	S	97.28	S	85
6759	Millet, Hungarian A. J. Turcotte, Newmarket	S	98	49	90
6671	Millet, Hungarian (4772) John B. Varick Co., Manchester	S	98.02	S	83
6964	Millet, Japanese Abbott Grocery Co., Keene	82.16	95.01	66.5	82
6801	Millet, Japanese (35-C28) Ayers & Jenkins, Rochester	S	96.70	77	88
6968	Millet, Japanese P. E. Belisle, Hillsborough	S	96.83	73	83
6847	Millet, Japanese Bell Hardware Co., Derry	85.19	97	61.5	90
6813	Millet, Japanese P. W. Bragg, Farmington	S	97	S	90
6869	Millet, Japanese (Liberty, 2472) A. F. Burtt Co., Plymouth	S	95.87	S	85.50
6893	Millet, Japanese (7703) Chase Grain Mill Plymouth	S	96.10	S	90
6760	Millet, Japanese (Fancy) J. H. Griffin, Newmarket	95.71	97	S	90
6974	Millet, Japanese (Fancy) C. W. Hildreth & Son, Lebanon	S	97	S	86
6834	Millet, Japanese (Fancy) Hill Hdw. & Paint Co., Nashua	S	96	75	90
6932	Millet, Japanese (4472) Holbrook Grocery Co., Woodsville	90.90	94.30	S	72
6903	Millet, Japanese (4481) H. G. Holton, Lancaster	S	92.20	S	80
6897	Millet, Japanese (4480) Leavitt, Gould & Hurlbert, Colebrook	S	98.11	S	80
6684	Millet, Japanese (4467) Manchester Hdw. Co., Manchester	S	96.84	A	80
6685	Millet, Japanese (4477) McQuesten & Lewis, Manchester	S	97.65	S	92
6705	Millet, Japanese (Fancy) J. J. Moreau & Son, Manchester	89.28	97	S	90
6888	Millet, Japanese J. H. Morrill, Laconia	S	95.93	S	86.50
6836	Millet, Japanese (Fancy) Nashua Grain Co., Nashua	S	95	S	80
6843	Millet, Japanese (Fancy) W. F. Neal, Derry	78.45	97	S	85
6828	Millet, Japanese W. F. Peel, Nashua	A	95	S	90
6949	Millet, Japanese Rand, Ball & King Co., Claremont	95.35	97.81	S	82

A=Above. S=Satisfactory.

SEED EXAMINATION, 1928 — Continued.

Sample No.	Kind of Seed, Brand, Name and Address of Dealer	Purity		Germination	
		F'nd	Guaranteed	F'nd	Guaranteed
6781	Millet, Japanese S. A. Schurman & Son, Portsmouth	91.44	98	S	85
6774	Millet, Japanese (4474) J. H. Seavey, Dover	S	99.51	S	85
6736	Millet, Japanese (4477) Thompson & Hoague Co., Concord	S	97.40	75.5	95
6753	Millet, Japanese A. J. Turcotte, Newmarket	S	95	S	86
6673	Millet, Japanese (4477) John B. Varick Co., Manchester	S	97.65	S	90
6804	Oats (73113) Ayers & Jenkins, Rochester	S	99	S	95
6846	Oats (Fancy) Bell Hardware Co., Derry	S	98	S	90
6957	Oats (White Mountain) F. W. Clark, Wilton	S	96.50	S	95
6844	Oats (Granite State) Derry Farmers' Exchange, Derry	S	98.50	S	91
6961	Oats (Crosby's Fancy) D. O. Devens, Hancock	S	99	S	97
6746	Oats (No. 2, Ohio Recleaned) S. A. Dow & Son, North Hampton	99.07	—	92	—
6951	Oats (White Mountain, Swedish) George H. Eames & Son, Keene	S	99	S	98
6823	Oats (Natural) Fessenden Co. Inc., Londonderry	S	95	S	95
6794	Oats (Swedish Type, 73117) Jenness Hardware Co., Dover	S	97.50	S	94
6898	Oats (Swedish Type, 073542) Leavitt, Gould & Hurlbert, Colebrook	S	99	S	95
6775	Oats (Welcome) F. W. Neal & Co., Dover	S	99	S	98
6911	Oats (Ohio) Pike & Gale, Littleton	98.04	—	91.5	—
6788	Oats (Swedish Type, 073536) J. H. Seavey, Dover	S	98.36	S	96
6745	Oats (Swedish Type, 73331) Thompson & Hoague Co., Concord	S	98.50	S	96
6769	Oats (Pennant Brand) B. M. Varrell, Portsmouth	S	99.50	S	98
6910	Oats (Blue Seal) H. K. Webster Co., Colebrook	S	97	S	90
6744	Orchard Grass (37188) Thompson & Hoague Co., Concord	S	91.50	78	90
6806	Red Clover (Medium Pine Tree, 24290-91) Ayers & Jenkins, Rochester	S	99.08	S	94
6810	Red Clover P. W. Bragg, Farmington	S	99	S	85
6872	Red Clover (French, 26690) W. B. Brown, Ashland	S	99	89	—
6853	Red Clover (French, 6251) A. F. Burtt Co., Plymouth	S	99	S	90
6871	Red Clover (Fullwerth Medium 7307) Chase Grain Mill, Plymouth	S	99.48	S	92
6900	Red Clover (Domestic Medium, 24437) G. B. Currier Co., Colebrook	S	99	S	94
6913	Red Clover (XX) Depot Store, Littleton	S	95	S	90
6747	Red Clover (Pan American, French) S. A. Dow & Son, North Hampton	S	98	S	90
6892	Red Clover (Liberty, 2486) Farmer's Grain Store, Ashland	S	99	A	85.50

A=Above. S=Satisfactory.

SEED EXAMINATION, 1928 — Continued.

Sample No.	Kind of Seed, Brand, Name and Address of Dealer	Purity		Germination	
		F'nd	Guaran-teed	F'nd	Guar-anteed
6805	Red Clover (Pan American, French) E. C. Foss Co., Rochester	S	98.50	S	90
6833	Red Clover (Pan American) Hill Hdw. & Paint Co., Nashua	S	98.50	S	90
6929	Red Clover (Medium White Mtn.) Holbrook Grocery Co., Woodsville	S	99.25	S	92
6930	Red Clover (Special Domestic) Holbrook Grocery Co., Woodsville	S	92.30	S	90
6947	Red Clover (Northern European, XXX) Holbrook Grocery Co., Keene	S	99.80	S	90
6948	Red Clover (Domestic Medium) Holbrook Grocery Co., Keene	S	97	S	90
6904	Red Clover (Ace Medium, 24444) H. G. Holton, Lancaster	S	96.42	S	90
6959	Red Clover (Domestic Medium, 24294) Hopkins Brothers, Belcher Co., Greenfield	S	98	S	92
6817	Red Clover (2487) J. Jones & Son, Alton	97.96	99	S	90
6857	Red Clover (Pan American, Domestic) Keegan & French, Franklin	S	98.50	S	90
6906	Red Clover (Ace) C. C. King Co., Whitefield	S	98	S	93
6683	Red Clover (Ace, Domestic Medium, 241971) Manchester Hdw. Co. Manchester	S	98.90	S	93
6688	Red Clover (Ace, French, 27480) Manchester Hdw. Co., Manchester	S	98	S	92
6713	Red Clover (Domestic Medium, 2495) McQuesten & Lewis, Manchester	S	99	S	93
6876	Red Clover (Domestic Medium, 24459) Meredith Grain Co., Meredith	S	99	S	95
6681	Red Clover (Pine Tree, Domestic Medium Merrimack Farmers' Exchange Manchester	S	99.32	S	95
6710	Red Clover (Pan American) J. J. Moreau & Son, Manchester	S	98.50	S	90
6782	Red Clover (Eureka Imported) F. W. Neal & Co., Dover	98.68	99.25	S	90
6790	Red Clover (Pan American, Domestic) F. W. Neal & Co., Dover	96.20	98.50	S	90
6841	Red Clover (Importor) W. F. Neal, Derry	S	98	S	90
6822	Red Clover (Choice) W. F. Peel, Nashua	S	99	S	92
6921	Red Clover (Domestic, Pan American) Pike & Gale, Littleton	S	99	S	90
6785	Red Clover (Pan American, French) S. A. Schurman & Son, Portsmouth	S	98.50	S	90
6935	Red Clover (Medium Domestic, 24469) Frank Smith Co., Lancaster	A	99	S	92
6728	Red Clover (Medium, Ace, 24345) Thompson & Hoague Co., Concord	S	98.38	S	92
6756	Red Clover A. J. Turcotte, Newmarket	S	98	71	90
6659	Red Clover (Domestic Medium Pine Tree) John B. Varick Co., Manchester	S	99.24	S	92
6666	Red Clover (Mammoth Native Pine Tree) John B. Varick Co., Manchester	S	99.25	S	92

A=Above. S=Satisfactory.

SEED EXAMINATION, 1928 — Continued.

Sample No.	Kind of Seed, Brand, Name and Address of Dealer	Purity		Germination	
		F'nd	Guaranteed	F'nd	Guaranteed
6670	Red Clover (Mammoth Ace) John B. Varick Co., Manchester	S	98	S	92
6908	Red Clover (Domestic Medium, 24299) H. K. Webster Co., Colebrook	S	99.02	S	94
6814	Red Clover (Imported) E. T. Willson, Farmington	S	98	S	90
6800	Red Top (Fancy Pine Tree, 30923) Ayers & Jenkins, Rochester	A	92.50	S	90
6839	Red Top (Pan American) Bell Hardware Co., Derry	S	92	75	90
6732	Red Top (Ace, Fancy) A. H. Britton, Concord	A	90	S	92
6856	Red Top (Monadnock, 30744) W. B. Brown, Ashland	A	90	74	90
6854	Red Top (R-T 6040) A. F. Burtt Co., Plymouth	A	93	S	92
6719	Red Top (Pan American) Capitol Hardware Co., Concord	S	92	S	90
6873	Red Top (7820) Chase Grain Mill, Plymouth	A	92	S	90
6925	Red Top (Ace, Fancy, 30751) A. F. Clement & Son, Lisbon	S	91.50	S	90
6768	Red Top R. L. Costello, Portsmouth	S	93	S	89
6956	Red Top (Monadnock) J. Cushing Co., Peterboro	S	90	77	90
6889	Red Top (Fancy, 2362) Farmers' Grain Store, Ashland	A	93.80	S	90
6824	Red Top (Fancy Ace, 30714) Fessenden Co., Inc., Londonderry	S	91	S	90
6767	Red Top (No. 1) Hilliard & Kimball, Exeter	S	90	S	90
6950	Red Top (XX) Holbrook Grocery Co., Keene	S	88	78.5	92
6894	Red Top (Ace, Fancy, 30964) H. G. Holton, Lancaster	S	90.50	S	92
6818	Red Top (30208) J. Jones & Son, Alton	S	90	S	90
6902	Red Top (XXX) C. C. King Co., Whitefield	S	90	S	88
6700	Red Top (Fancy, 030111) Manchester Hdw. Co., Manchester	S	91.30	S	91
6701	Red Top (Ace Fancy, 30866) Manchester Hdw. Co., Manchester	A	90.60	S	90
6704	Red Top Manchester Hdw. Co., Manchester	S	88.90	S	90
6852	Red Top (Fancy Pine Tree, 030420) Meredith Grain Co., Meredith	A	94.20	85	95
6708	Red Top (Pan American) J. J. Moreau & Son, Manchester	S	92	S	90
6777	Red Top (Pan American) F. W. Neal & Co., Dover	88.37	92	S	90
6830	Red Top (No. 1) W. F. Peel, Nashua	S	90	S	90
6831	Red Top (Pan American) W. R. Peterson Co., Nashua	S	92	79	90
6881	Red Top (Pan American) Rand & Dearborn, Laconia	S	92	S	90
6858	Red Top (Eureka) C. N. Roberts, Meredith	A	94	66	90
6798	Red Top (No. 1) Strafford Co. Grain Mill, Rochester)	S	90	74	90

A=Above. S=Satisfactory.

SEED EXAMINATION, 1928 — Continued.

Sample No.	Kind of Seed, Brand, Name and Address of Dealer	Purity		Germination	
		F'nd	Guaranteed	F'nd	Guaranteed
6729	Red Top (Ace, 30938) Thompson & Hoague Co., Concord	S	92	S	90
6733	Red Top (Ace, 30767) Thompson & Hoague Co., Concord	S	91.20	S	90
6757	Red Top (Choice) A. J. Turcotte, Newmarket	S	90	S	96
6663	Red Top (Ace Fancy, 30925) John B. Varick Co., Manchester	A	90	S	90
6664	Red Top (Ace Fancy, 30889) John B. Varick Co., Manchester	A	90	S	90
6674	Red Top (Pine Tree Fancy, 30923) John B. Varick Co., Manchester	S	93	S	92
6815	Red Top (Gem) E. T. Willson, Farmington	S	90	S	90
6750	Red Top W. A. Young, Exeter	A	90	S	90
6752	Red Top (Eureka) W. A. Young, Exeter	93.98	96	S	90
6657	Rutabaga (St. Andrews) John B. Varick Co., Manchester	S	98	54	88
6672	Rutbaga (Yellow Am. Purple Top) John B. Varick Co., Manchester	S	98	59.5	87
6763	Rye (Fancy Rosen) J. H. Griffin, Newmarket	S	98	81	90
6958	Rye (King's Choice Rosen) Hopkins Bros., Belcher Co., Greenfield	S	98	S	92
6780	Rye (White Rosen, 216264) Jenness Hardware Co., Dover	S	99	78.5	92
6741	Rye, Spring (074314) Merrimack Farmers' Exchange Concord	S	94.17	S	93
6709	Rye, Spring J. J. Moreau & Son, Manchester	S	98	73	90
6838	Rye, Spring (74116) Nashua Grain Co., Nashua	S	93.97	69	80
6779	Rye, Winter F. W. Neal & Co., Dover	S	98	79	92
6680	Rye Spring (74304) John B. Varick Co., Manchester	S	99	S	90
6695	Soy Beans Merrimack Farmers' Exchange Manchester	S	98	S	91
6849	Soy Beans (Manchu) Merrimack Farmers' Exchange Derry	S	99.50	S	85
6676	Soy Beans (Medium Green) John B. Varick Co., Manchester	S	99	S	83
6738	Sweet Clover (White Blossom, 2594-95) Merrimack Farmers' Exchange Concord	S	99	S	91
6650	Sweet Clover (White Blossom) John B. Varick Co., Manchester	S	99	75.5	95
6803	Timothy (Pine Tree, 68072) Ayers & Jenkins, Rochester	S	99.65	S	95
6967	Timothy (Liberty, 6165) P. E. Belisle, Hillsborough	S	99.60	S	94.50
6811	Timothy P. W. Bragg, Farmington	A	98	S	90
6874	Timothy (Pine Tree, 26690) W. B. Brown, Ashland	S	99.65	S	90
6737	Timothy (Pine Tree, 66844) A. H. Britton, Concord	S	99.60	A	84

A=Above. S=Satisfactory.

SEED EXAMINATION, 1928 — Continued.

Sample No.	Kind of Seed, Brand, Name and Address of Dealer	Purity		Germination	
		F'nd	Guaranteed	F'nd	Guaranteed
6720	Timothy (Pan American) Capitol Hardware Co., Concord	S	99.60	S	92
6796	Timothy (Liberty, 6093) Freeman Carson, Rochester	S	99.60	S	92
6867	Timothy (Liberty, 6179) Chase Grain Co., Plymouth	S	99.60	S	92
6885	Timothy (Matrix, 7511) Chase Grain Co., Plymouth	S	99.80	S	94
6926	Timothy A. F. Clement & Son, Lisbon	S	98	S	90
6886	Timothy (Pine Tree, 65984) G. G. Cummings, Bristol	S	99.65	S	95
6909	Timothy (Pine Tree, 67521) G. B. Currier Co., Colebrook	S	99.65	S	93
6912	Timothy (66904, XX) Depot Store, Littleton	A	98	S	91
6914	Timothy (White Mountain) Depot Store, Littleton	S	99.85	S	95
6915	Timothy (Liberty, 61061) Depot Store, Littleton	S	99.60	S	90
6916	Timothy (Gold Medal) Depot Store, Littleton	S	99.70	S	94
6748	Timothy (Pan American) S. A. Dow & Son, North Hampton	S	99.60	S	90
6944	Timothy (Freedom) Goodnow Bros. Co., E. Jaffrey	S	99.70	S	93
6945	Timothy (Monadnock, 67440) Goodnow Bros. Co., E. Jaffrey	S	99.60	S	94
6826	Timothy (Gem) Hill Hdw. & Paint Co., Nashua	S	99.65	S	92
6832	Timothy (Bay State) Hill Hdw. & Paint Co., Nashua	S	99.60	S	95.94
6766	Timothy (Pine Tree, 66313) Hilliard & Kimball, Exeter	S	99.65	S	96
6793	Timothy (Pine Tree, 68090) Jenness Hardware Co., Dover	S	99.65	S	95
6820	Timothy (Liberty) J. Jones & Son, Alton	S	99.60	S	92
6905	Timothy (Bison, 66368) C. C. King Co., Whitefield	S	98.10	S	91
6952	Timothy (Choice) J. H. Kiniry, Claremont	S	99	S	91
6899	Timothy (Pine Tree, 68175) Leavitt, Gould & Hurlbert, Colebrook)	S	99.65	S	95
6971	Timothy (XXX) Lewis Brothers, Lebanon	S	99	S	93
6716	Timothy (Pan American) Manchester Grain Co., Manchester	S	99.60	S	90
6717	Timothy (Freedom) Manchester Grain Co., Manchester	S	99.70	S	93
6698	Timothy (Pine Tree, 66201) Manchester Hdw. Co., Manchester	S	99.50	S	94
6699	Timothy (Pine Tree, 67829) Manchester Hdw. Co., Manchester	S	99.65	S	95
6702	Timothy (Pine Tree, 66103) Manchester Hdw. Co., Manchester	S	99.60	S	94
6715	Timothy (Pine Tree, 67948) McQuesten & Lewis, Manchester	S	99.60	S	95
6696	Timothy (Pine Tree, 67257) Merrimack Farmers' Exchange Manchester	S	99.65	S	94

A=Above. S=Satisfactory.

SEED EXAMINATION, 1928 — Continued.

Sample No.	Kind of Seed, Brand, Name and Address of Dealer	Purity		Germination	
		F'nd	Guaranteed	F'nd	Guaranteed
6954	Timothy (White Mtn., 67575) ..... Metcalf & Calahan, Walpole	S	99.65	S	95
6707	Timothy (Pan American) ..... J. J. Moreau & Son, Manchester	98.97	99.60	S	92
6877	Timothy (Pine Tree, 68025) ..... J. H. Morrill, Laconia	S	99.60	S	95
6835	Timothy (Pan American) ..... Nashua Grain Co., Nashua	S	99.60	S	92
6840	Timothy (Imperator) ..... W. F. Neal, Derry	S	99	S	90
6845	Timothy (Bison, 65464) ..... Parker Brothers, Goffstown	A	98.76	S	94
6848	Timothy (Gem, 6065) ..... Parker Brothers, Goffstown	S	99.65	S	92
6962	Timothy (Pine Tree, 67881) ..... C. A. Perkins, Charlestown	S	99.65	S	95
6942	Timothy (Pine Tree, 68088) ..... W. N. Potter & Son, Winchester	S	99.65	S	95
6870	Timothy (Pan American) ..... Rand & Dearborn, Laconia	S	99.60	S	92
6864	Timothy (Gold Medal) ..... C. N. Roberts, Meredith	S	99.75	S	94
6883	Timothy (Pine Tree, 66803) ..... H. C. Sanborn, Laconia	S	99.60	S	94
6770	Timothy (Pan American) ..... S. A. Schurman & Son, Portsmouth)	S	99.60	S	92
6772	Timothy (Pine Tree, 67310) ..... J. H. Seavey, Dover	S	99.65	S	94
6887	Timothy (Gem) ..... Shepard Grocery Co., Franklin	S	98.70	S	94
6933	Timothy (Pine Tree, 67526) ..... Frank Smith Co., Lancaster	S	99.65	S	94
6934	Timothy (Pine Tree, 68216) ..... Frank Smith Co., Lancaster	S	99.60	S	95
6896	Timothy (Pine Tree, 67561) ..... F. B. Spaulding Co., Lancaster	S	99.60	S	94
6865	Timothy (Monadnock, 67430) ..... C. P. Stevens Co., Franklin	S	99.60	S	94
6879	Timothy (Pine Tree, 66552) ..... C. P. Stevens Co., Franklin	S	99.60	S	95
6799	Timothy (Bay State) ..... Strafford Co. Grain Mill, Rochester)	S	99.60	S	94
6734	Timothy (Pine Tree, 67533) ..... Thompson & Hoague Co., Concord	S	99.60	S	94
6735	Timothy (Pine Tree, 68111) ..... Thompson & Hoague Co., Concord	S	99.65	S	95
6758	Timothy ..... A. J. Turcotte, Nemmarket	A	98	S	94
6660	Timothy (Pine Tree, 67943) ..... John B. Varick Co., Manchester	S	99.60	S	94
6662	Timothy (Pine Tree, 68091) ..... John B. Varick Co., Manchester	S	99.60	S	94
6665	Timothy (Durham, 66937) ..... John B. Varick Co., Manchester	S	99.60	S	94
6675	Timothy (Jersey, 68039) ..... John B. Varick Co., Manchester	S	98	S	91
6677	Timothy (Jersey, 67920) ..... John B. Varick Co., Manchester	A	98	S	91
6901	Timothy (Pine Tree, 68019) ..... H. K. Webster Co., Colebrook	S	99.60	S	95
6940	Timothy ..... D. Whiting and Son, Milford	A	99	S	98

A=Above. S=Satisfactory.

SEED EXAMINATION, 1928 — Continued.

Sample No.	Kind of Seed, Brand, Name and Address of Dealer	Purity		Germination	
		F'nd	Guaranteed	F'nd	Guaranteed
6816	Timothy (Gem, 6065) E. T. Willson, Farmington	A	98	A	90
6749	Timothy (Pine Tree, 63847) W. A. Young, Exeter	S	99.60	S	95
6882	Vetch Spring Keegan & French, Franklin	S	98	S	90
6907	Wheat, Spring (Marquis) C. B. Currier Co., Colebrook	S	98	S	90
6931	Wheat, Spring (Monadnock) Holbrook Grocery Co., Woodsville	S	99	S	92
6742	Wheat (Marquis type, 75321) Merrimack Farmers' Exchange Concord	S	98.50	S	96
6694	Wheat Spring J. J. Moreau & Son, Manchester	S	98	67	90
6862	White Clover (2496) A. F. Burtt Co., Plymouth	S	97.20	S	87
6731	White Clover (Choice) Capitol Hardware Co., Concord	S	96	S	90
6689	White Clover (Choice) J. J. Moreau & Son, Manchester	S	96	S	90
6787	White Clover (26306) J. H. Seavey, Dover	S	95.25	S	95
6722	White Clover (26459-60) Thompson & Hoague Co., Concord	S	95.75	A	90
6723	White Clover (26392) Thompson & Hoague Co., Concord	S	92.50	S	92
6668	White Clover (Fancy) John B. Varick Co., Manchester	S	95	A	85

A=Above. S=Satisfactory.

SUMMARY TABLE

Showing General Results of Seed Inspection Work
for the year ending June 30, 1928

Kind of Seed	Number of Samples	Purity Compared to Guarantee			No Guarantee	Germination Compared to Guarantee			No Guarantee
		Above	Satisfactory	Below		Above	Satisfactory	Below	
Alfalfa	9	0	9	0	0	0	8	1	0
Alsike	29	4	21	4	0	2	25	2	0
Barley	13	0	12	1	0	0	13	0	0
Bluegrass, Kentucky	4	0	4	0	0	0	3	1	0
Buckwheat	3	0	3	0	0	0	3	0	0
Canada Field Peas	2	0	2	0	0	0	2	0	0
Corn	4	0	4	0	0	0	4	0	0
Mangles	2	0	2	0	0	0	0	2	0
Millet	58	10	36	12	0	1	37	20	0
Oats	16	0	14	0	2	0	14	0	2
Red Clover	40	1	36	3	0	1	37	1	1
Red Top	37	12	23	2	0	0	29	8	0
Rutabaga	2	0	2	0	0	0	0	2	0
Rye	8	0	8	0	0	0	3	5	0
Soy Beans	3	0	3	0	0	0	3	0	0
Sweet Clover	2	0	2	0	0	0	1	1	0
Timothy	68	7	60	1	0	2	66	0	0
Wheat	4	0	4	0	0	0	3	1	0
White Clover	7	0	7	0	0	2	5	0	0
Miscellaneous	3	1	2	0	0	0	2	1	0
	314	35	254	23	2	8	258	45	3

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no.233-250